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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,075	11/21/2001	Shunsuke Shuto	UNI42.001AUS	1492

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EXAMINER

KIELIN, ERIK J

ART UNIT PAPER NUMBER

2813

DATE MAILED: 05/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/990,075

Applicant(s)

SHUTO ET AL. *CAA*

Examiner

Erik Kielin

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 3-8 and 11-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,9 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of the invention of Group I, claims 1, 2, 9, and 10 in Paper No. 5 is acknowledged.
2. Claims 3-8 and 11-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,773,178 (**Shiota et al.**).

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Regarding claim 1, **Shiota** discloses a method for manufacturing a homeotropic alignment liquid crystal film, wherein a side chain type liquid crystal polymer comprising a monomer unit (a) containing a liquid crystalline fragment side chain and a monomer unit (b) containing a non-liquid crystalline fragment side chain (col. 4, lines 10-15) is coated on a substrate on which a vertical alignment film is not prepared (col. 4, lines 20-21), and the liquid crystal polymer is fixed while maintaining an alignment state after the liquid crystal polymer is homeotropically aligned in liquid crystal state (col. 5, lines 50-61).

Regarding claim 2, **Shiota** discloses the method for manufacturing a homeotropic alignment liquid crystal film according to claim 1, wherein a material of a substrate is polymer, glass or metal.

(See also col. 2, lines 20-48; col. 4, lines 10-33--especially lines 21-22; col. 5, lines 50-61; section entitled "Example 1" beginning in col. 6.)

Regarding claim 9, **Shiota** discloses a method for manufacturing a homeotropic alignment liquid crystal film, wherein the homeotropic alignment liquid crystalline composition according to claim 7 --specifically, a side chain type liquid crystal polymer being able to form a homeotropic alignment liquid crystal layer on a substrate on which a vertical alignment layer film is not prepared (col. 4, lines 20-21) and a photopolymerizable liquid crystal compound-- is coated on a substrate on which a vertical alignment film is not prepared (col. 4, lines 20-21) subsequently the homeotropic alignment liquid crystalline composition is homeotropically aligned in liquid crystal state and is applied an optical irradiation after fixed in a state of alignment state being maintained (col. 5, lines 50-61).

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Regarding claim 10, **Shiota** discloses the method for manufacturing a homeotropic alignment liquid crystal film according to claim 9, wherein a material of the substrate is polymer substance, glass or metal.

(See also col. 2, lines 20-48; col. 4, lines 10-33--especially lines 21-22; col. 5, lines 50-61; section entitled "Example 1" beginning in col. 6.)

### ***Conclusion***


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,498,450 and US 5,679,414 (each to **Akashi** et al.) teach a liquid crystal polymer film composed of a polymer having liquid crystal side chain and a non-liquid crystal side chain (Abstract) and that no alignment film is required to prepare the film (col. 2, lines 13-17).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik Kielin whose telephone number is 703-306-5980. The examiner can normally be reached on 9:00 - 19:30 on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr., can be reached at 703-308-4940. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
Erik Kielin  
May 23, 2003